

## **ENHANCING AUDIO SIGNALS BY NONLINEAR SPECTRAL OPERATIONS**

### **ABSTRACT OF THE DISCLOSURE**

A system and method are disclosed for enhancing audio signals by nonlinear spectral operations. Successive portions of the audio signal are processed using a subband filter bank. A nonlinear modification is applied to the output of the subband filter bank for each successive portion of the audio signal to generate a modified subband filter bank output for each successive portion. The modified subband filter bank output for each successive portion is processed using an appropriate synthesis subband filter bank to construct a modified time-domain audio signal. High modulation frequency portions of the audio signal may be emphasized or de-emphasized, as desired. The modification may be applied within one or more frequency bands.